Montana Board of Oil and Gas Conservation
Environmental Assessment

Operator: Longshot Oil, LLC
Well Name/Number: Barber 15-1
Location: SW SE Section 1 T5S R24E
County: Carbon **, MT; Field (or Wildcat)** Wildcat

Air Quality

(possible concerns)
Long drilling time: No, 3 to 4 days drilling time.
Unusually deep drilling (high horsepower rig): No, single derrick drilling rig, 1850' TD
Possible H2S gas production: Possible.
In/near Class I air quality area: Near Class I air quality area, Crow Indian Reservation.
Air quality permit for flaring/venting (if productive): Yes, DEQ air quality permit required under 75-2-211.

Mitigation:
X Air quality permit (AQB review)
__ Gas plants/pipelines available for sour gas
__ Special equipment/procedures requirements
__ Other:_____
Comments: No special concerns – using small rig to drill to 1850' TD.

Water Quality

(possible concerns)
Salt/oil based mud: No, freshwater or freshwater mud system and/or air.
High water table: No high water table anticipated.
Surface drainage leads to live water: No, closest drainage is an unnamed ephemeral tributary to the North Fork Five Mile Creek, about 1/16 of a mile to the north from this location. Within the North Fork Five Mile Creek is a stock pond, about 1 ½ miles to the northwest from this location.
Water well contamination: No, closest water wells are about 1 mile to the northeast from this location and is only 180' and 200' in depth. Surface hole will be drilled with freshwater and surface casing run and cemented from 150' to surface. Mainhole will be drilled with air, air/mist and mud. If productive 7" production casing will be cemented to surface.
Porous/permeable soils: No, silty sandy clay soils.
Class I stream drainage: No Class I stream drainage.

Mitigation:
__ Lined reserve pit
X Adequate surface casing
__ Berms/dykes, re-routed drainage
__ Closed mud system
__ Off-site disposal of solids/liquids (in approved facility)
__ Other: _____
Comments: 150' of surface casing cemented to surface adequate to protect freshwater zones. Also, air, air/mist and fresh water mud systems to be used. 7" production casing will be cemented to surface.

Soils/Vegetation/Land Use

(possible concerns)
Steam crossings: No, stream crossings anticipated.
High erosion potential: No, small cut, up to 4.1' and small fill, up to 5.3', required.
Loss of soil productivity: No, location will be restored after drilling in nonproductive and if productive unused portion of the drillsite will be reclaimed.
Unusually large wellsite: No, 150'X160' location size required.
Damage to improvements: Slight, surface use is a dryland crop field.
Conflict with existing land use/values: Slight

Mitigation
__ Avoid improvements (topographic tolerance)
__ Exception location requested
X Stockpile topsoil
__ Stream Crossing Permit (other agency review)
X Reclaim unused part of wellsite if productive
__ Special construction methods to enhance reclamation
__ Other _____

Comments: Surface access will be over existing county roads, Cottonwood Creek and Sheller Roads and will utilize existing ranch access trails. About 100' of new access will be built into this location. Cuttings will be buried in the earthen pit. Fluids will be allowed to evaporate. Pit will be backfilled when dry. No special concerns

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Health Hazards/Noise

(possible concerns)
Proximity to public facilities/residences: Closest residence is about 1 mile to the northeast from this location. The town of Edgar about 7.6 miles to the northwest, the town of Fromberg is about 9.1 miles to the southwest and the town of Pryor, about 8.3 miles to the east from this location.
Possibility of H2S: Slight
Size of rig/length of drilling time: Small drilling rig/short 3 to 4 days drilling time

Mitigation:
__ Proper BOP equipment
__ Topographic sound barriers
__ H2S contingency and/or evacuation plan
__ Special equipment/procedures requirements
__ Other:_____

Comments: BOP required due to faulted geology of the area and no nearby drilling.

Wildlife/recreation

(possible concerns)
Proximity to sensitive wildlife areas (DFWP identified): None identified.
Proximity to recreation sites: Chief Plenty Coups Memorial Park Grave about 7.3 miles to the east of this location. Bluewater State Hatchery site about 8.6 miles to the southwest of this location..
Creation of new access to wildlife habitat: No
Conflict with game range/refuge management: No

Threatened or endangered Species: Threatened or endangered species are the Canada Lynx, Black-Footed Ferret and Grizzly Bear. Candidate specie is the Greater Sage Grouse. Proposed specie is the Mountain Plover. Experimental nonessential specie is the Gray Wolf. FWP Montana Natural Heritage Program website lists only the Greater Sage Grouse as a species of concern.

Mitigation:

__ Avoidance (topographic tolerance/exception)
__ Other agency review (DFWP, federal agencies, DSL)
__ Screening/fencing of pits, drillsite
__ Other:_____

Comments: No concerns. Private cultivated surface land.

Historical/Cultural/Paleontological

(possible concerns)

Proximity to known sites: None identified

Mitigation

__ avoidance (topographic tolerance, location exception)
__ other agency review (SHPO, DSL, federal agencies)
__ Other:_____

Comments: No concerns. On private cultivated surface land.

Social/Economic

(possible concerns)

__ Substantial effect on tax base
__ Create demand for new governmental services
__ Population increase or relocation

Comments: Wildcat well. Until production is established social and economic issues cannot be assessed.

Remarks or Special Concerns for this site

Well is a 1850' Tensleep Formation test. Tensleep can flow large volumes of freshwater.

Summary: Evaluation of Impacts and Cumulative effects

No long term impact expected. Some short term surface impacts will occur, but will be mitigated in time.

I conclude that the approval of the subject Notice of Intent to Drill (does/**does not**) constitute a major action of state government significantly affecting the quality of the human environment, and (does/**does not**) require the preparation of an environmental impact statement.

Prepared by (BOGC): Steven Sasaki
(title:) Chief Field Inspector
Date: October 1, 2010

Other Persons Contacted:

_____
Montana Bureau of Mines and Gelogy, GWIC website
(Name and Agency)
Water wells in Carbon County
_____
(subject discussed)
October 1, 2010
(date)

US Fish and Wildlife, Region 6 website
(Name and Agency)
ENDANGERED, THREATENED, PROPOSED AND CANDIDATE SPECIES MONTANA COUNTIES, Carbonl County
(subject discussed)
October 1, 2010
(date)

Montana Natural Heritage Program Website (FWP)
(Name and Agency)
Heritage State Rank= S1, S2, S3, Section 1 T5S R24E
(subject discussed)

October 1, 2010
(date)

If location was inspected before permit approval:
Inspection date: _____
Inspector: _____
Others present during inspection: _____